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09/897,331	07/02/2001	Job Cornelis Oostveen	NL000409	2099

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BRIARCLIFF MANOR, NY 10510

EXAMINER

ORTIZ CRIADO, JORGE L

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/897,331  
Filing Date: July 02, 2001  
Appellant(s): OOSTVEEN ET AL.

**MAILED**

**APR 08 2005**

**Technology Center 2600**

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James D. Leimbach  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 01/18/2005.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 1-16 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

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**(9) Prior Art of Record**

6,069,870	Maeda et al.	05-2000
5,930,210	Timmermans et al.	07-1999

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 4-6 and 14-16 are rejected under 35 U.S.C. 102(b) and claims 1-3,7 and 8-13 are rejected under 35 U.S.C. 103(a). This rejection is set forth in a prior Office Action, mailed on 03/23/2004.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 4-6, and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Maeda et al. U.S. Patent No. 6,069,870.

Regarding claim 4, Maeda et al. discloses a record carrier having information marks along a track thereof (See col. 6, lines 56-62; Figs. 2,27) and exhibiting:

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first variations caused by existence and nonexistence of the information marks along the track (See col. 6, lines 56-62; Figs. 2,27),

said first variations representing an information signal recorded on said record carrier (See col. 6, lines 56-62; Figs. 2,27), and

second variations caused by variations associated with the information marks (See col. 6, lines 56-62; col. 7, line 22 to col. 8, line 35; Fig. 2,27);

the phase of the second variations being coupled to the phase of the first variations (See col. 6, lines 56-62; Fig. 27; col. 7, line 22 to col. 8, line 35; Figs. 3,27).

Regarding claim 5, Maeda et al. discloses characterized in that the second variations have either a first or a second phase with respect to the first variations (See col. 7, line 22 to col. 8, line 35; Figs. 3,27).

Regarding claim 6, Maeda et al. discloses characterized in that first and the second phase differ with 180 degrees (See col. 7, line 22 to col. 8, line 35; Figs. 3,27).

Regarding claim 14, Maeda et al. discloses characterized in that said predetermined variation pattern allows sampling if said second variations at twice the frequency of said second variations (See col. 7, line 22 to col. 8, line 35; Figs. 3,27)

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Regarding claim 15, Maeda et al. discloses characterized in that said second variation have a first and a second phase such a predetermined relationship between said first and second phase coincides to a start of frame (See col. 7, line 22 to col. 8, line 35; Figs. 3,27).

Regarding claim 16, Maeda et al. discloses said predetermined relationship is zero-crossing (See col. 7, line 22 to col. 8, line 35; col. 18, lines 45-59; Figs. 3,27).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1-3,7 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timmermans et al. U.S. Patent No. 5,930,210 in view of Maeda et al. U.S. Paten No. 6,069,870.

Regarding claim 1, Timmermans et al. discloses an information system (See col. 1, line 13; Fig. 4,5), comprising:

a record carrier having information marks along a track thereof (See col. 3, lines 47-49; Fig. 1) and exhibiting:

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first variations caused by existence and nonexistence of the information marks along the track (See col. 4, lines 12-27; Fig. 1),

said first variations representing an information signal recorded on said record carrier (See col. 3, lines 47-49; Fig. 1) and

second variations caused by variations associated with the information marks (See col. 3, line 57 to col. 4, line 12);

a playback apparatus (See col. 1, lines 21-22; Figs. 4,5) including:

a transducer unit for scanning said record carrier (See col. 5, lines 26-33; Fig. 5),

said transducer unit being adapted to detect said first variations and said second variations (See col. 5, lines 26-41; Fig. 5),

a first recovery unit coupled to the transducer unit for recovering a clock signal from the first variations (See col. 5, lines 63 to col. 6, line 2; Fig. 5, ref# 63),

a second recovery unit coupled to the transducer unit for recovering an information signal from the first variations (See col. 5, lines 60-62; Fig. 5 ref# 61),

a detection unit for detecting whether said second variations exhibit a predetermined variation pattern on the basis of at least one signal, which is at least indicative of said second variations, originating from said transducer unit (See col. 1, line 58- col. 2, line 2; col. 6, lines 27-31; Fig. 5, ref# 62)

the detection unit using the said clock signal for detecting and an enabling unit for enabling said second recovery unit to recover the information signal when said detection unit detects said predetermined variation pattern (See col. 6, line 63- col. 7, line 12; col. 7, 51-61; Figs. 5- ref# (62)(61)(63), 8).

Timmermans et al. further teaches having the second variations detected by the same scanning means as used for detection of the first variations, wherein the second variations are associated with the position of the first variations (See col. 4, lines 21-36), but Timmermans et al. does not expressly disclose wherein the phase of the second variations being coupled to the phase of the first variations.

However this feature is well known in the art as evidenced by Maeda et al., which discloses a record carrier exhibiting information marks along a track (See col. 6, lines 56-62; Figs. 2,27),

first variations caused by existence and nonexistence of the information marks along the track said first variations representing an information signal recorded on the record carrier (See col. 6, lines 56-62; Figs. 2,27) and

a second variations caused by variations associated with the information marks (See col. 6, lines 56-62; Fig. 2,27)

wherein the phase of the second variations being coupled to the phase of the first variations (See col. 6, lines 56-62; Fig. 27; col. 7, lines 10-13, lines 33-47; Figs. 3,27).

Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention to coupled the phase of the second variation to the phase of the first variation in order to avoid tracking fails that would cause reproduction of the non-desired information as suggested by Maeda et al.



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Regarding claim 2, Timmermans et al. further discloses wherein said second variations exhibit a modulation pattern representing a code (See col. 2, lines 9-14; col. 6, line 63 to col. 7, line 12);

and said detection unit includes a demodulation unit for recovering said code on the basis of said at least one signal, and an activation unit for activating said enabling unit when said code is recovered (See col. 6, line 63 to col. 7, line 12; Figs. 5,8).

Regarding claim 3, Timmermans et al. further discloses wherein the information signal recorded on said record carrier is of a type which is recoverable by means of a predetermined type of data processing (See col. 2, lines 18-36),

said code indicating the predetermined type of data processing to be used for recovering the information signal (See col. 2, lines 18-36), and

said playback apparatus further includes a unit for setting said recovery unit in a mode in which the predetermined type of data processing is performed when the information signal is recovered (See col. 2, lines 18-36).

Regarding claim 7, Timmermans et al. discloses a playback apparatus (See col. 1, lines 21-22; Figs. 4,5) including:

a transducer unit for scanning a record carrier (See col. 5, lines 26-33; Fig. 5),

said transducer unit being adapted to detect at least first and second variations (See col. 5, lines 26-41; Fig. 5),

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said first variations representing an information signal recorded on said record carrier  
(See col. 3, lines 47-49; Fig. 1) and

second variations caused by variations associated with the information marks (See col. 3, line 57 to col. 4, line 12);

a first recovery unit coupled to the transducer unit for recovering a clock signal from the first variations (See col. 5, lines 63 to col. 6, line 2; Fig. 5, ref# 63),

a second recovery unit coupled to the transducer unit for recovering an information signal from the first variations (See col. 5, lines 60-62; Fig. 5 ref# 61);

a detection unit for detecting whether second variations exhibit a predetermined variation pattern on the basis of at least one signal, which is at least indicative of second variations, originating from said transducer unit (See col. 1, line 58- col. 2, line 2; col. 6, lines 27-31; Fig. 5, ref# 62)

the detection unit using the said clock signal for detecting and an enabling unit for enabling said second recovery unit to recover the information signal when said detection unit detects said predetermined variation pattern (See col. 6, line 63- col. 7, line 12; col. 7, 51-61; Figs. 5- ref# (62)(61)(63), 8).

Timmermans et al. further teaches having the second variations detected by the same scanning means as used for detection of the first variations, wherein the second variations are associated with the position of the first variations (See col. 4, lines 21-36), but Timmermans et al. does not expressly disclose wherein the phase of the second variations being coupled to the phase of the first variations.

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However this feature is well known in the art as evidenced by Maeda et al., which discloses a record carrier exhibiting information marks along a track (See col. 6, lines 56-62; Figs. 2,27),

first variations caused by existence and nonexistence of the information marks along the track said first variations representing an information signal recorded on the record carrier (See col. 6, lines 56-62; Figs. 2,27) and

a second variations caused by variations associated with the information marks (See col. 6, lines 56-62; Fig. 2,27)

wherein the phase of the second variations being coupled to the phase of the first variations (See col. 6, lines 56-62; Fig. 27; col. 7, line 22 to col. 8, line 35; Figs. 3,27).

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to coupled the phase of the second variation to the phase of the first variation in order to avoid tracking fails that would cause reproduction of the non-desired information as suggested by Maeda et al.

Regarding claims 8 and 11, the combination of Timmermans et al. and Maeda et al. would show characterized in that said predetermined variation pattern allows sampling if said second variations at twice the frequency of said second variations (See Maeda et al. col. 7, line 22 to col. 8, line 35; Figs. 3,27)

Regarding claims 9 and 12, the combination of Timmermans et al. and Maeda et al. would show characterized in that said second variation have a first and a second phase such a

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predetermined relationship between said first and second phase coincides to a start of frame (See Maeda et al. col. 7, line 22 to col. 8, line 35; Figs. 3,27)

Regarding claims 10 and 13, the combination of Timmermans et al. and Maeda et al. would show said predetermined relationship is zero-crossing (See Maeda et al. col. 7, line 22 to col. 8, line 35; col. 18, lines 45-59; Figs. 3,27).

**(11) Response to Argument**

**Rejections Under 35 U.S.C 102(b)**

**In regard to claim 4**

Applicant argues that Maeda et al. (herein after referred as Maeda) does not disclose or suggest “phase of the second variations being coupled with the phase of the second variations”.

Claims are given their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. > E-Pass Techs., Inc. v. 3Com Corp., 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003)

Meriam-Webster Dictionary -“coupled” (e.g. **1 a** : to connect for consideration together **b** : to join for combined effect)

In light of the supporting disclosure as an example, the phase of the first variation ‘a predetermined number of channel bits, represented by the first variations’; first variations information marks; second variations as wobbles; “phase of the second variations as predetermined number of wobbles”.

Maeda et al. discloses the phase of the second variations being coupled to the phase of the first variations in that a predetermined number of wobbles correspond to a predetermined number of channel bits represented by the first variations. Specifically, Maeda discloses the phase wobble track 270 in the borders 14, 15 “being coupled” to the phase of the first variations in that, a predetermined number of wobbles (second variations) correspond to a predetermined number of channel bits represented by the first variations (information marks 274), the predetermined number of wobbles represent address information, which is read simultaneously with the information represented by the marks 274 (See for example col. 7, line 22 to col. 8, line 35; Figs. 3,27). Furthermore, as shown in Fig. 27 a predetermined number of marks 274 are being coupled to a predetermined number of wobbles, which represent the address.

#### **In regard to claim 5 and 6**

Applicant argues that Maeda does not disclose or suggest having a first or second phase with respect to the first variations; and where the first variations of Maeda appears to be random.

Maeda et al. discloses the phase of the second variations being coupled to the phase of the first variations in that a predetermined number of wobbles correspond to a predetermined number of channel bits represented by the first variations and having a first or a second phase in

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which the first and the second phase differs with **180 degrees** (See col. 7, line 22 to col. 8, line 35; shown Figs. 3)

Furthermore, Maeda shows having a predetermined number of channel bits represented by the first variations marks **274**. The examiner cannot find in claim language given their broadly interpretation, contains any feature related with any random, fixed, synchronous, asynchronous, specific etc. number of first variations. The only feature found is “a predetermined number being coupled”. Applicant is reminded that limitations appearing in the specification but not recited in the claim are not read into the claim. > E-Pass Techs., Inc. v. 3Com Corp., 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003)

#### **In regard to claim 14**

Applicants argues that Maeda et al. does not disclose or suggest a predetermined variation pattern allows sampling if said second variations at twice the frequency of said second variations.

Maeda et al. discloses variations being coupled to the phase of the first variations in that a predetermined number of wobbles correspond to a predetermined number of channel bits represented by the first variations and having a first or a second phase in which the first and the second phase differs with 180 degrees having a predetermined variation pattern, which hence as a result of the configuration of first an second variations claimed, the predetermined variation pattern inherently allows sampling if said second variations at twice the frequency of said second variations. As also required by Applicant (See page 7, lines 11-14).

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In response to applicant's argument that no mention of allowing the desired result of sampling, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

**In regard to claim 15 and 16**

Applicant argues that Maeda does not disclose or suggest said second variation have a first and a second phase such a predetermined relationship between said first and second phase coincides to a start of frame and wherein coincides with a zero crossing.

Maeda et al. discloses the tracks divided in blocks/(sectors), which includes frames of a predetermined number of bits and as shown in Fig. 2 of Maeda et al. shows the predetermined relationship between said first and second phase coincides to a start of "a frame" (start of block).

Furthermore, Maeda discloses wherein the synch area 12 is synchronous with the second variations/ wobbles (see col. 8, lines 36-65) and as shown Fig. 3, the two phases are coincidence with a "zero crossing", which as shown the sinusoidal signal in Fig. 3, change the phase at zero cross.

Applicant is reminded that it is noted that the features (i.e., zero crossing of an EFM frame) is not recited in the rejected claim(s). Although the claims are interpreted in light of the

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specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claims are their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. > *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003)

### **Rejections Under 35 U.S.C 103(a)**

#### **In regard to claim 1-3, 7**

Applicant argues that Maeda et al. (herein after referred as Maeda) in combination with Timmermans et al (herein after referred as Timmermans) does not disclose or suggest “phase of the second variations being coupled with the phase of the second variations”.

Claims are given their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. > *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003)

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In light of the supporting disclosure as an example, the phase of the first variation ‘a predetermined number of channel bits, represented by the first variations’; first variations



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information marks; second variations as wobbles; “phase of the second variations as predetermined number of wobbles”.

Maeda et al. discloses the phase of the second variations being coupled to the phase of the first variations in that a predetermined number of wobbles representing a code and correspond to a predetermined number of channel bits represented by the first variations. Specifically, Maeda discloses the phase wobble track 270 in the borders 14, 15 “being coupled” to the phase of the first variations in that, a predetermined number of wobbles (second variations) correspond to a predetermined number of channel bits represented by the first variations (information marks 274), the predetermined number of wobbles represent address information, which is read simultaneously with the information represented by the marks 274 (See for example col. 7, line 22 to col. 8, line 35; Figs. 3,27). Furthermore, as shown in Fig. 27 a predetermined number of marks 274 are being coupled to a predetermined number of wobbles, which represent the address.

The features as claimed in claim 1, show that the transducer “being adapted to” detect first and second variations.

Timmermans et al. teaches the transducer for scanning and being adapted to detection of the first variations and second variations, but Timmermans et al. does not expressly disclose wherein the phase of the second variations in the being coupled to the phase of the first variations in the record carrier.

Timmermans et al. further teaches having the second variations detected by the same scanning means as used for detection of the first variations, wherein the second variations are associated with the position of the first variations.

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And, it would have been obvious to one with ordinary skill in the art at the time of the invention to coupled the phase of the second variation to the phase of the first variation and adapt the transducer to perform the detection of such record carrier avoiding tracking fails that would cause reproduction of the non-desired information, as taught by Maeda et al.

**In regard to claim 8 and 11**

Applicant argues that Maeda in combination with Timmermans does not disclose or suggest a predetermined variation pattern allows sampling if said second variations at twice the frequency of said second variations.

Maeda et al. discloses variations being coupled to the phase of the first variations in that a predetermined number of wobbles correspond to a predetermined number of channel bits represented by the first variations and having a first or a second phase in which the first and the second phase differs with 180 degrees having a predetermined variation pattern, which hence as a result of the configuration of first an second variations claimed, the predetermined variation pattern as taught by Maeda inherently allows sampling if said second variations at twice the frequency of said second variations. As also required by Applicant (See page 7, lines 11-14).

In response to applicant's argument that no mention of allowing the desire result of sampling, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

**In regard to claims 9-10 and 12-13**

Applicant argues that Maeda does not disclose or suggest said second variation have a first and a second phase such a predetermined relationship between said first and second phase coincides to a start of frame and wherein coincides with a zero crossing.

Maeda et al. discloses the tracks divided in bocks/(sectors), which includes frames of a predetermined number of bits and as shown in Fig. 2 of Maeda et al. shows the predetermined relationship between said first and second phase coincides to a start of “a frame” (start of block).

Furthermore, Maeda discloses wherein the synch area 12 is synchronous with the second variations/ wobbles (see col. 8, lines 36-65) and as shown Fig. 3, the two phases are coincidence with a “zero crossing”, which as shown the sinusoidal signal in Fig. 3, change the phase at zero cross.

Applicant is reminded that it is noted that the features (i.e., zero crossing of an EFM frame) is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claims are their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. > *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003)



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For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,

Jorge L. Ortiz-Criado  
Patent Examiner  
Art Unit 2655

joc  
April 4, 2005

Conferees  
David Ometz   
Dorvil Richmond   
Nabil Hindi

  
DAVID L. OMETZ  
PRIMARY EXAMINER

 PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510